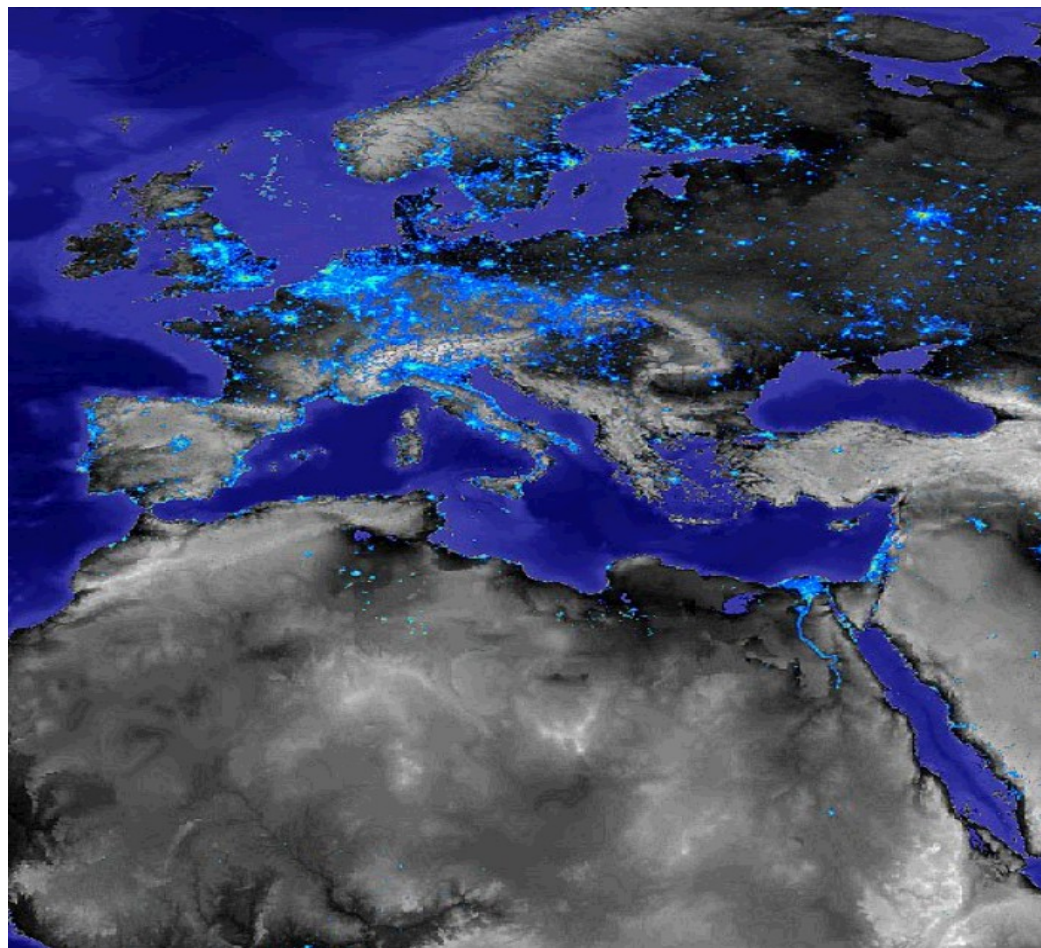


# FY04 1st Quarter Program Update

Harold L. Smith  
Chief, CADD/GIS  
Technology Center




# 96.011 - Center Internet & Intranet Technology

Provide up to date information on developments at The CADD/GIS Technology Center.


## Status:

- In the process of redesigning the site using a centralized process. This process will allow information to be inter-related and searchable.
- Developing a taxonomy for menu items.
- Consolidate the Foundation Knowledge and the Real Property Management web sites into the Center's.
- Ensuring the site will be compatible with the Corp's new Technical Excellence Network




for facilities, infrastructure, and environment **CADD and Geospatial Technologies**

<ul style="list-style-type: none"> <li>Home</li> <li>Events</li> <li>Contacts</li> <li>CADD/GIS Tech Center</li> <li>Links</li> <li>Products</li> <li>Projects</li> <li>Groups</li> <li>Contracts</li> <li>Classes</li> <li>Calendars</li> <li>Discussion Forums</li> <li>CADD/GIS Bulletin</li> <li>Visitor Information</li> <li>Geodatabase News</li> </ul>	<ul style="list-style-type: none"> <li> <b>Metadata Collection and Bulk Loading System (MCABLS)</b>                      Headquarters recently received delivery on a report entitled: "<a href="#">Data Integration, Interoperability, and Conversion Services for US Army Corps of Engineers Automated Document Conversion Strategy Initiative</a>" by Intergraph Solutions Group. The document provides an overview of a strategy for planning and implementing automated document conversion. The strategy or methodology was designed to reduce cost of storing documents. The deliverable also included: "<a href="#">Metadata Collection and Bulk Loading System (MCABLS) Software</a>" and a <a href="#">Metadata Collection and Bulk Loading Software Users Guide</a> was provided. Of note, an FY03/04 CADD/GIS Center project called "Historic &amp; Digital Map Collection Methods &amp; Online Retrieval Tool Development (03.036)" will leverage and complement the Intergraph report and product. The project will produce standardized scanning specifications and references for scanning various products and documents in an acceptable quality and format. It will develop a QC/QA - Metadata Building Tool for managing scanning jobs. As part of this project a WWW-based records inventory survey will determine the scope of the Corp's applicable document collection and both the current and future storage and retrieval requirements of users, administrators, and managers.                 </li> <li> <b>Double Issue of CADD/GIS Insights is now Available</b>                      The Fall03 issue of the CADD/GIS Insights is a Special Double Issue focusing on Homeland Security. The Center's role, field user experiences, and industry developed CADD/GIS applications on threat assessments and security measures are featured in this issue. In addition, articles highlighting the latest releases on Center products and services are included.                 </li> <li> <b>SDSFIE and FMSFIE Certification on Windows 95, 98, and Me.</b>                      To reduce expenses related to certifying software applications on older operating systems, the CADD/GIS Technology Center will certify Release 2.31 of the Spatial Data Standard for facilities, infrastructure and environment (SDSFIE) and the Facilities Management Standard for facilities, infrastructure and environment                 </li> </ul>
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Current Partners  
Join Us

Hosted by:



US Army Corps of Engineers  
Engineer Research and Development Center

PI - Drew Anderson

Funding - \$150K

# 96.013 - Spatial Data Standard (SDSFIE)

Continue maintenance and update of Spatial Data Standard for facilities, infrastructure, & environment (SDSFIE).

## Components:

1. GIS content schema and customer service
2. Software tools
3. Meetings and Briefings
4. ANSI Standard
5. Geodatabase Tools



PI - Nancy Towne

Funding - \$325K



# 96.015 - Facility Management Standard (FMSFIE)

## FMSFIE Release 2.30 Browser :

**FMSFIE Transactional Facility Management Standard Browser/Printer**

Configure Find View Print Strategy Help

Entity Set  
 ▲ All Entity Sets

Entity Classes  
 ▲ All Entity Classes

Table Physical Name

ACCESS  
 ADDRESS  
 AFFILIATION\_TYPE\_REF  
 ARCHITECTURAL\_USAGE\_REF  
**ASSET**  
 ASSET\_CLASS\_REF  
 ASSET\_PERSON\_OBJECT\_MILESTONE  
 BUILDING\_OBJECT\_COLOR  
 BUILDING\_OBJECT\_CONTROL\_NUMBER  
 BUILDING\_OBJECT\_FEATURE  
 BUILDING\_OBJECT\_FINISH  
 BUILDING\_OBJECT\_LINK  
 BUILDING\_OBJECT\_LOCATION  
 BUILDING\_OBJECT\_MATERIAL  
 BUILDING\_OBJECT\_MULTIMEDIA  
 BUILDING\_OBJECT\_ORGANIZATION  
 BUILDING\_OBJECT\_SPECIFICATION  
 BUILDING\_OBJECT\_STATUS  
 BUILDG\_PERSON\_OBJECT\_MILESTONE  
 CATEGORY\_CODE\_REF

Entity Set  
 Asset

Entity Class  
 Core

Sub-Class  
 Base

Family  
 Generic

Table Code  
 amcorbasgenast

Definition  
 This table contains information about federal real property and other related entities based on their classification and need to support organizational requirements

ASSET Attributes

ASSET\_SAID  
 ASSET\_ID\_TX  
 ASSET\_NM  
 ASSET\_DESC\_TX  
 ASSET\_CLASS\_SAID  
 ASSET\_CLASS\_II\_SAID  
 PROPERTY\_REC\_NO  
 CAT\_CODE\_SAID  
 OWNERSHIP\_SAID  
 PRIMARY\_ORG\_SAID  
 READNS\_RATING\_SAID  
 FACIL\_ID

Data Type  
 Length

Key Type

Links to

Definition

Relates to

ASSET\_CLASS\_REF  
 CATEGORY\_CODE\_REF  
 OWNERSHIP\_REF  
 READINESS\_RATING\_REF

Release 2.300


Physical Model

# 96.017 - A/E/C CADD Standard

The A/E/C CADD Standard is a means of developing consistent CADD files within and between organizations. The A/E/C CADD Standard currently covers 14 disciplines and is compliant with the U.S. National CAD Standard.

## Status:

- **NetSPEX installed at the Center and Vicksburg District (mirror site). Sacramento District to be added as a mirror site in November. Testing to occur for a year.**
- **15 installation requests for NetSPEX Designer from**



**A/E/C CADD STANDARD RELEASE 2.0**

The A/E/C CADD Standard is compliant with version 2.0 of the U.S. National CAD Standard.

The A/E/C CADD Standard contains supplemental material and DGN specific requirements not addressed in the U.S. National CAD Standard.

September 2001

CADD/GIS TECHNOLOGY CENTER  
*for facilities, infrastructure, & environment*

PI - Toby Wilson/Stephen Spangler

Funding - \$315K

# 96.055 - Support of NIBS Facility Information

National Institute of Building Sciences (NIBS) - The direct involvement of the Center through standards development for Government and Industry.

## Status:

Several members are participating on five groups.

D. Horner - CADD Council, FMOC, Chair FM Domain of IAI

T. Wilson - CADD Council, Attends Architectural Domain IAI

S. Spangler/E. Huell (CADD Council Technical Reviewers)

F. Grobler - Chair of IAI PM Domain, US Technical Director

**NIBS preparing to vote on Version 3.0**



PI - Dave Horner

Funding - \$20k

# 98.190 - Continued Support of EBS

FY03 - Continued to support EBS through out the DoD. Updated ASFI and FedBizOpps posting requirements. Continued to support plan rooms.

## Status:

- EBS will transition to consolidated Electronic Contracting System (ECS) site for the Corps.

Advertised Solicitations - Microsoft Internet Explorer

Address: http://tsn.wes.army.mil/CentralEBS/AdvertisedSolicitations.asp?SolType=All&AgencyCode=DACA45&AgencyName=USACE-Omaha

This site currently contains listings of solicitations from the following agencies: ARNG-Rhode Island, ARNG-Selfridge ANG Base MI, USACE-Alaska, USACE-Albuquerque, USACE-B...

Show Solicitations: By Agency: By Solicitation Type:

Click on a Solicitation Number to Register.  
Click on a heading to sort by that heading.

CD = CD Paper = CD & Paper Web = CD & Web

Advertised Solicitations  
List Last Updated: 11/18/2003 7:41:43 AM CST  
Agency Name: USACE-Omaha  
Solicitation Type: All  
Sorted By: Closing Date

Agency	Solicitation Number	Title	Location	Media	Issue Date	Closing Date
<b>Architect-Engineer</b>						
<b>Construction - RFP</b>						
USACE Omaha	DACA45-03-R-0003	UPGRADE BASE INFRASTRUCTURE PHASE III, CRWU 05-3003	BUCKLEY AFB, COLORADO		11/7/2003	12/23/2003
USACE Omaha	DACA45-03-R-0051	Replace Hydrant Fuel System	Offutt AFB, Nebraska		11/17/2003	1/8/2004 2:00 PM CST
USACE Omaha	DACA45-03-R-0034 Advanced Notice	Replace Central Fire Alarm System, PN 3378, Iowa Army Ammunition Plant	Middletown, Iowa		11/21/2003	1/9/2004
USACE Omaha	W9128F-04-R-0003 Advanced Notice	ADAL USAF HOSPITAL AT THE AIR FORCE ACADEMY	AIR FORCE ACADEMY, COLORADO		12/15/2003	1/15/2004
<b>Construction - IFB</b>						
USACE Omaha	W9128F-04-R-0001	Critical Project Security Program Missouri River Projects	Fort Peck Dam, MT; Garrison Dam, ND; Oahe Dam, SD; Fort Randall Dam, SD.		11/14/2003	12/14/2003
USACE Omaha	W9128F-04-R-0004 Advanced Notice	Construction Contract For The Missouri River Mitigation Project	between Sioux City, IA and Kansas City, MO		12/1/2003	1/5/2004 1400
USACE Omaha	DACW45-03-R-0004	EMERGENCY STREAMBANK PROTECTION (SECTION 14)	JAMES RIVER near REDFIELD, SOUTH DAKOTA			Postponed
<b>Research and Development - RFP</b>						
<b>Service and Supply - RFQ</b>						
<b>Service and Supply - RFP</b>						
<b>Service and Supply - IFB</b>						
<b>Service and Supply - Simplified Acquisition</b>						
<b>Construction - Simplified Acquisition</b>						

PI - Elias Arredondo

Funding - \$50K

# 99.021 - Foundation Knowledge Web Portal

Develop a web site to provide end user's information from a business perspective.

## Status-03 Finalization:

- Center is hosting the KM web site and developing a direct integration with the Center's new "portal-based" Web site.
- Initial schematic design work was completed 3 February 03
- Further refinement and development includes integration with the TSC (Center's Site&Real Property Sites)-see following slide.
- Had several conference and VTC conversations with CRB to integrate site into Center Site and RPM Site.
- Integrated Web Project with Intranet Technology Project at Center. Project will be part of Web Site in FY04

Home KM Center e-Learning Business Lines Library Collaboration Content Review Board

Welcome David.H.Horner@erd.usace.army.mil | Portal Home Search Logoff

## Foundation Knowledge

The Knowledge Management Portal for facilities, infrastructure and the environment

Planning Real Estate Capital Improvements Environmental Housing Operations Contingency & Emergency Privatization & Outsourcing R&D and Technology Transfer

### Quick Launch

- ▶ CADD/GIS Technology Center
- ▶ KM Magazine
- ▶ FM Link
- ▶ NAVFAC Home Page
- ▶ Army Knowledge Online
- ▶ Navy Chief Information Officer
- ▶ ASCE KM

### Welcome to Foundation Knowledge

Welcome to the **Foundation Knowledge Portal**. Features that can be found here include expanded and rotating content, collaboration, and improved security. Our Knowledge Management (KM) program provides more complete access to content at the CADD/GIS Technology Center. Knowledge Management is the leveraging of collective wisdom to increase responsiveness and innovation. It is the integration of people, process, tacit and explicit knowledge, and social capital enhanced with technology that empower the organization for success. Foundation Knowledge is KM applied to Facilities Management (FM).

### Featured Content

#### Collaborative Engineering & Design

Written and edited by Gregory B. Baecher, PhD.

In almost any project life cycle, the costs of up front engineering design comes first and project revenues only come later. Because project revenues are typically many multiples of the upfront cost of design, a major consideration is avoiding delay in reaching those projects revenues. Even a doubling of upfront designed cost may impact project profitability substantially less than, say, a six month delay in bringing the project online. As a result, considerable attention has been given in recent years to integrating the project design team through web-based collaborative engineering, and in so doing significantly shortening the time required for design. [Read more.](#)

### Upcoming Events

PI - Dave Horner

Funding - \$51k



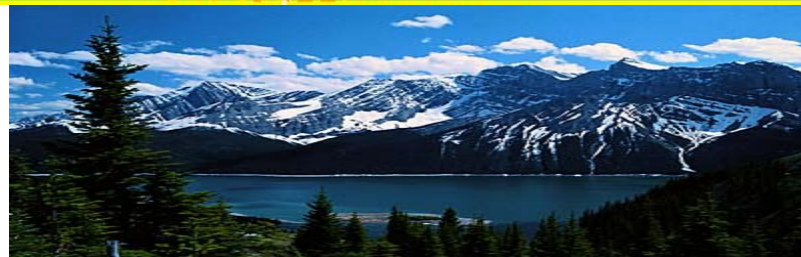
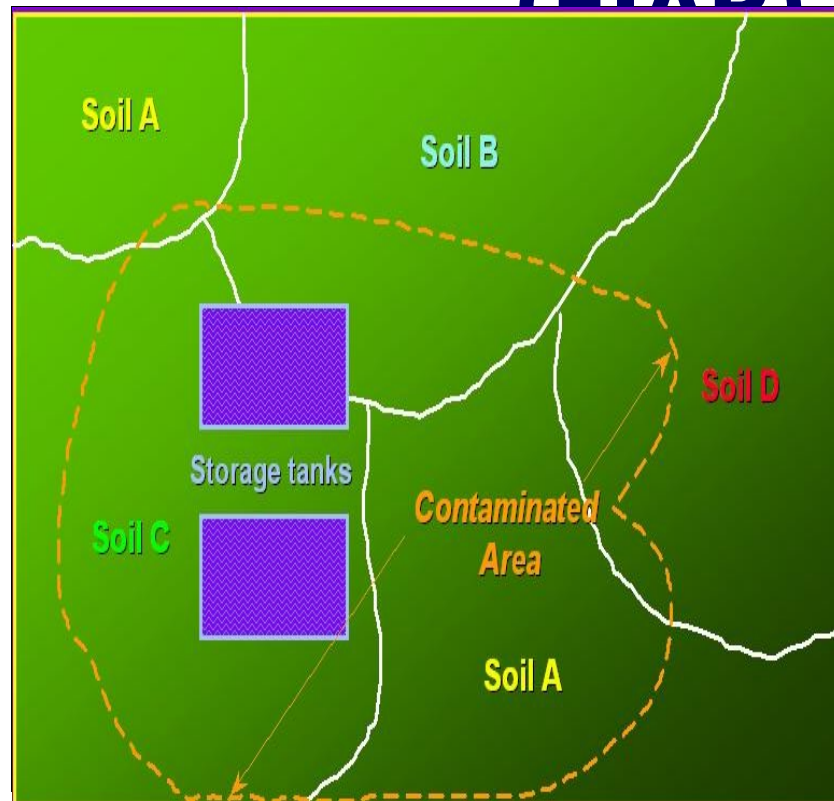


# 01.040 - Environmental Impact Analysis Process

(EIAP)

## Fiscal Year 2004 Priorities:

- Web-Based Interactive EIAP Application with Supporting Information:
  - Update EIAP web-based application for Navy/Marine Corps Intranet (NMCI) compliance.
  - Integration and establishment of links to Federal Real Property Management Regulations (RPM) on Center website.
  - Updated User Manual.
  - Complete Project Web Site.
- GIS-Enabled EIAP:
  - Investigate and facilitate partnering with commercial software vendors to support integration of EIAP with SDSFIE compliant GIS.
  - Investigate feasibility of supporting initial development of GIS based



# 01.044 - Consolidated Object Strategy

## SDSFIE Object

### Transformation:

Top Down Approach:

*Creating a UML Model structure for common, shared Objects.*

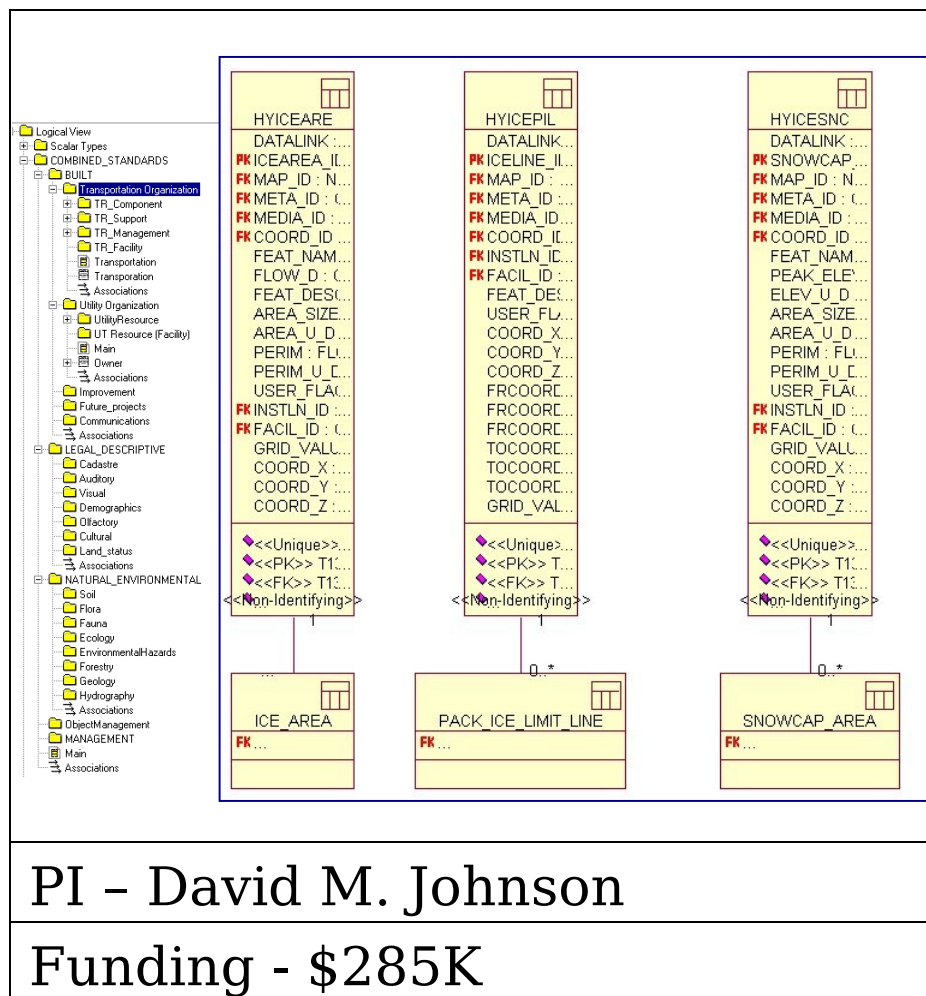
Bottom Up Approach:

*Creating a UML Model from the current SDSFIE*

*a two pronged approach has been started to bring the SDSFIE into an Object Model format.*

### Status:

- Initial translation of SDSFIE Entity Model into a UML format model.
- Initial approach to an overall



PI - David M. Johnson

Funding - \$285K

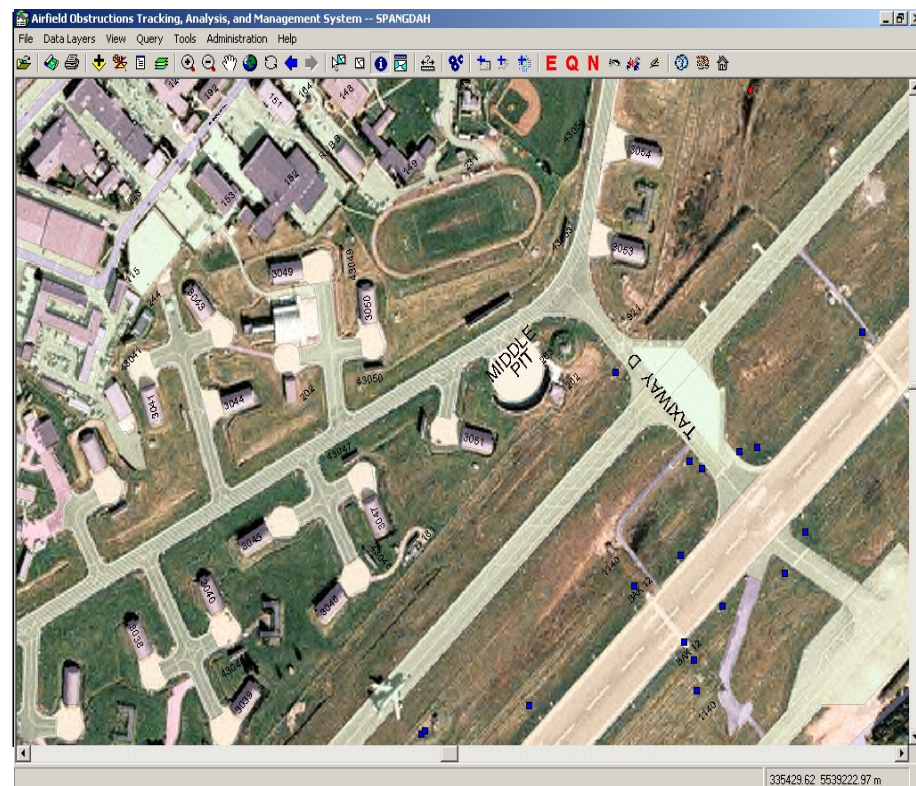


# 02.030 - Airfield Management Suite

Continuation project -  
Development of an Airfield Management suite. Airfield Operations is tasked to manage air space, vehicle traffic, aircraft, runways and related equipment, airfield lighting, parking, obstructions, line of sight analysis, cargo and personnel movement, and pavement inventory.

## Status:

- There are two competing applications for managing airfield obstructions - AOMS, and AIROBS. The Air Staff is polling the user's in the field for support towards each product. Col Cullis's group is working to define the support, and determine if one product can be utilized.



PI - Dave Horner

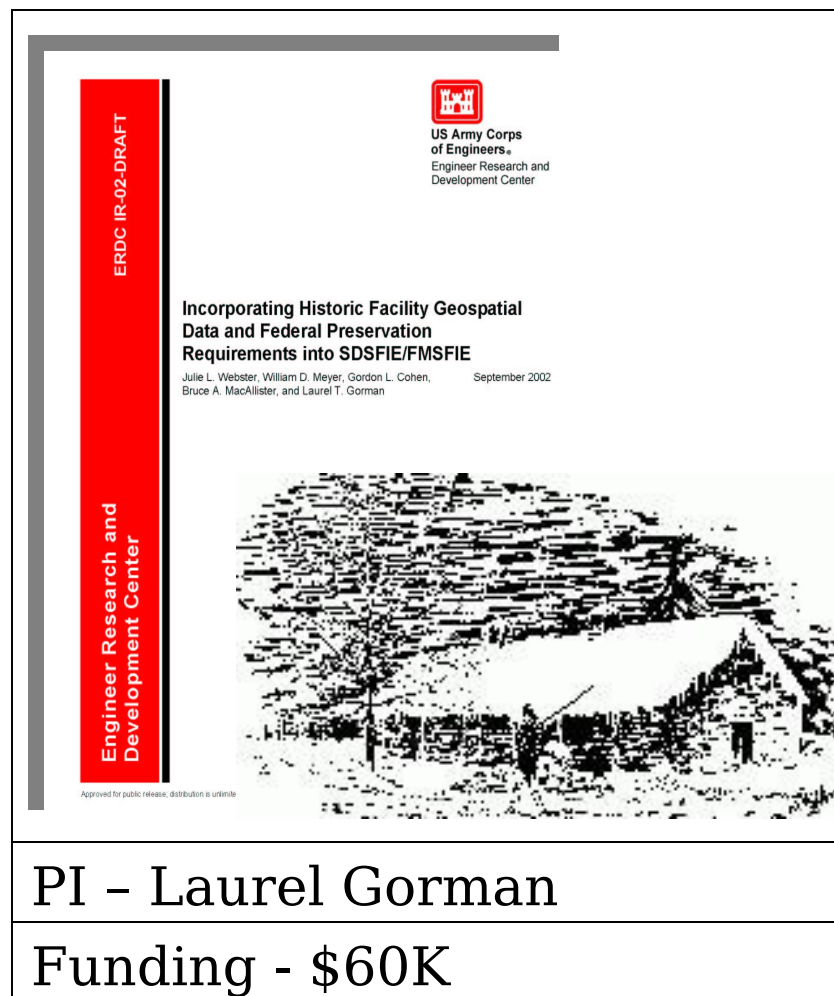
Funding - \$40k



# 02.042 - SDSFIE for Historic Buildings

The purpose of this participation will be to influence Federal policies and standards for spatial data, insure compatibility between Federal and industry spatial data efforts, and incorporate these policies and standards into the Center's standards initiatives.

**Significant Accomplishments:**  
**Completed Phase 1 of reorganization of Historic Buildings Standard. Phase 1 results were presented at ESRI User Conference in Archeological Standards Track. Stressed life-cycle approach,**



# 03.009 - Interior Design Furniture Procurement

Software

## Interior Design Project Manager

*Provide base management of Interior Design Information for federal organizations.*

### Status:

- **First stage complete.**
  - **Initial Website and team review.**
- **Next Phase:**
  - **Incorporation of various federal business process requirements.**
  - **Final team review.**
  - **Implementation testing.**

Interior Design Project Manager

Home | Projects List | Edit Project Info | My Profile | Help Menu | Logout

Your Projects > Renovate CADD Lab
Add a building

Building Name

Edit the Project

Project Name: Renovate CADD Lab  
Charge No.: 01-99-2003  
Project to upgrade CADD Lab  
Footer:  
Location: Information Technology Laboratory (ITL)

Renovate CADD Lab > Manage Phases
Add a Phase

	Phase Name	Phase Description
Edit Remove	Finishes Upgrade	Finishes Upgrade
Edit Remove	Furnishings Upgrade	First table and then chair replacment.
Edit Remove	Wall Hanging Upgrade	Wall Hanging Upgrade

PI - David M. Johnson

Funding - \$69K FY04

funding??????

# 03.013 - FEMA Hazard & Disaster Entities in the

**SDSFIE**

Expand and enhance the SDSFIE by integrating FEMA entities and attributes and build data models of these enhancements

Status:

- Completed UML logical data models for FEMA disaster readiness and response.
- Completed correlation of SDSFIE to FEMA disaster readiness and response attributes.
- Completed supporting delta identification spreadsheet for SDSFIE incorporation



PI - Nancy Towne

Funding - \$50k

# 03.019 - Addition of Geospatial Range & Operational Area Data

Expand and enhance the SDSFIE to address range and operating area data entities

## Status:

- A white paper of the findings of the gap analysis completed.
- Delivered draft Gap Analysis document, consisting of the Gap Analysis Excel worksheet identifying SDSFIE modifications.
- Microsoft Visio data model.
- Contract awarded at Pax River for GAP Analysis.
- Phase II contract funded.



PI - Nancy Towne

Funding - \$75K/\$40K



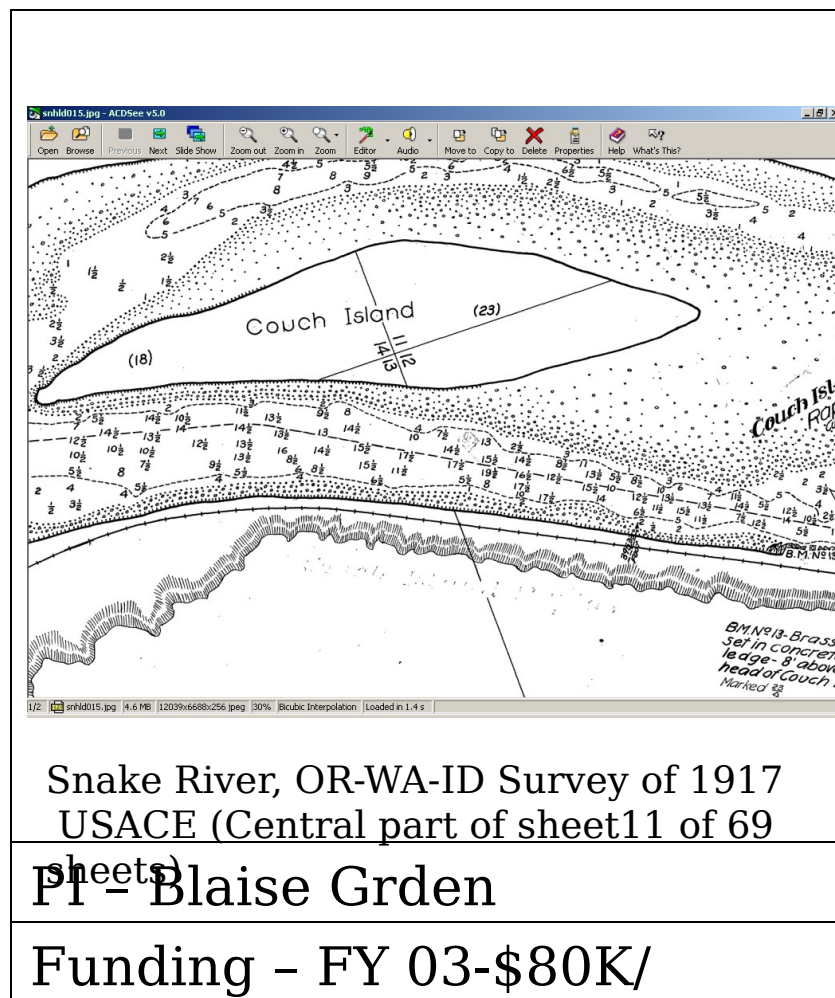
# 03.036 - Historic & Digital Map Collection

Develop process and workflows, recommend viewing tools, numbering system, standard schema for the storage, retrieval and dissemination of historical and modern digital maps. Create a Historical and Modern Digital Map Collection.

Phase 1: Develop a National Standard Meta data schema with QA/QC. Develop the process, recommended workflow, evaluate industry

status deployable retrieval tools.

- Phase 1 - Contract awarded with Phase 2: Implement a Digital Library in Step 9/4/03. Contractor is in the Phase 3: Expand to include photography process of conducting a records inventory and need survey.



# Reimbursable Projects

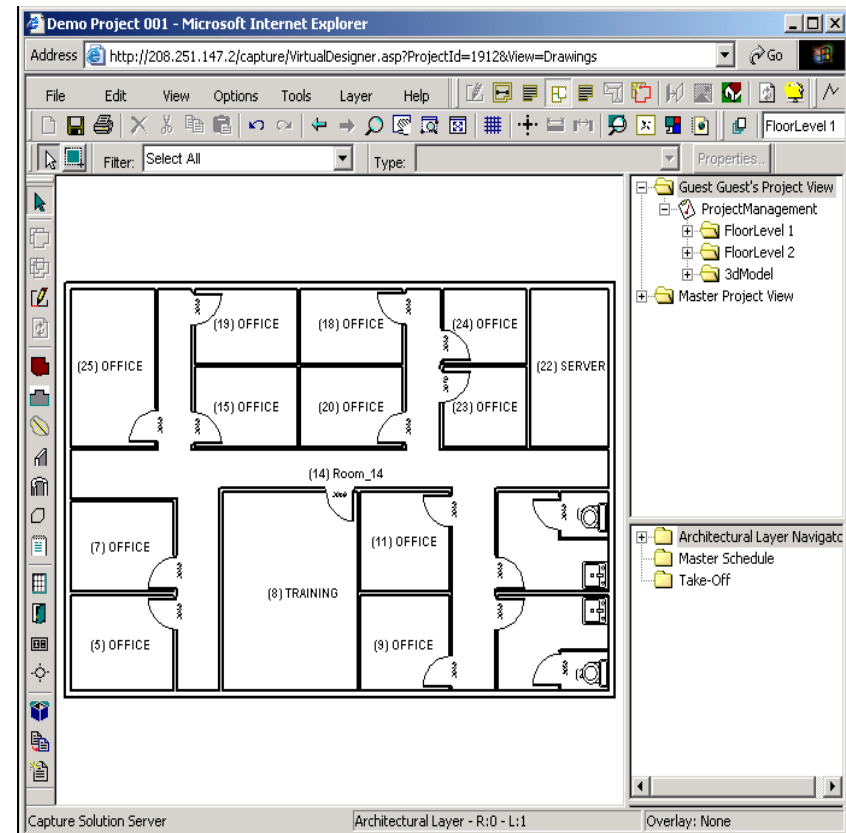
# Rental (Recruiting ) Facilities Management Information System RFMIS-NT

Funded by Office of the Secretary Defense to provide recruiting facilities for Army, Navy, Air Force, Marine Corps, and Coast Guard (future).

The existing RFMIS will be modernized with new technologies (NT) so that business can be done via the World Wide Web with a single Graphical User Interface (GUI) and database

## Status:

- Mods issued – total current cost \$4.4m
- Contract approx 40% complete.
- DITSCAP contract awarded



PI – Blaise Grden

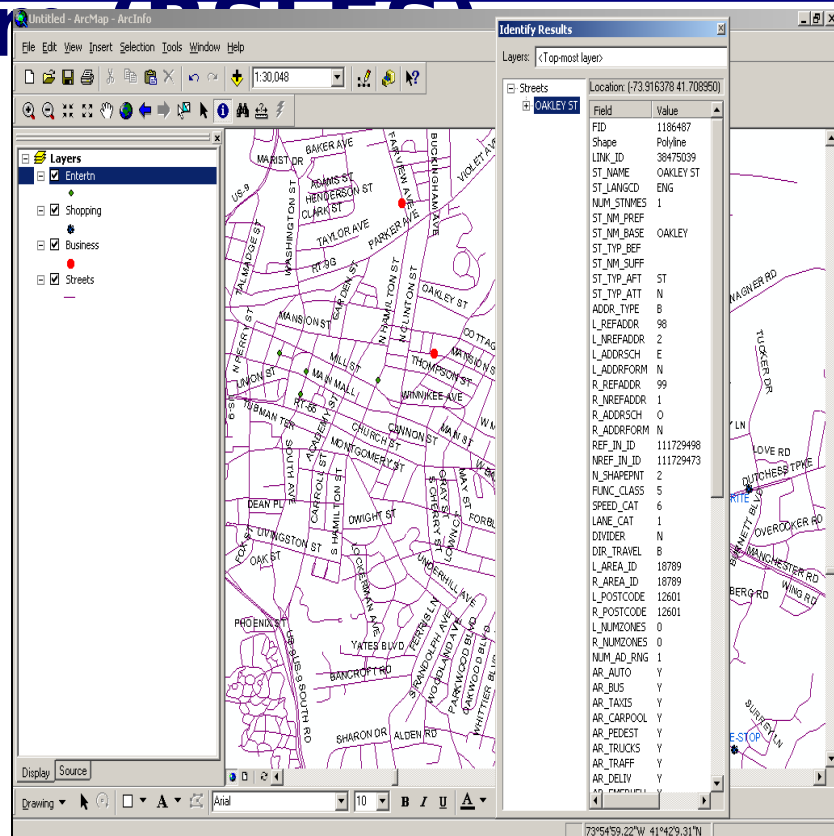
Funding – FY04 - 540K

# Recruit Station Location Evaluation

RSLES to be Funded by ODT to location analysis of recruiting facilities for Army, Navy, Air Force, Marine Corps, and Coast Guard (future). RSLES will use GIS software and will be incorporated with RFMIS-NT.

## Status:

- RSLES Workshop was held at the Center with members from all services and the Real Estate representatives from Corps Districts. September 2004. RSLES was recommended to be updated.
- Request for Proposal from contractor were sent out for an updated RSLES requirements document



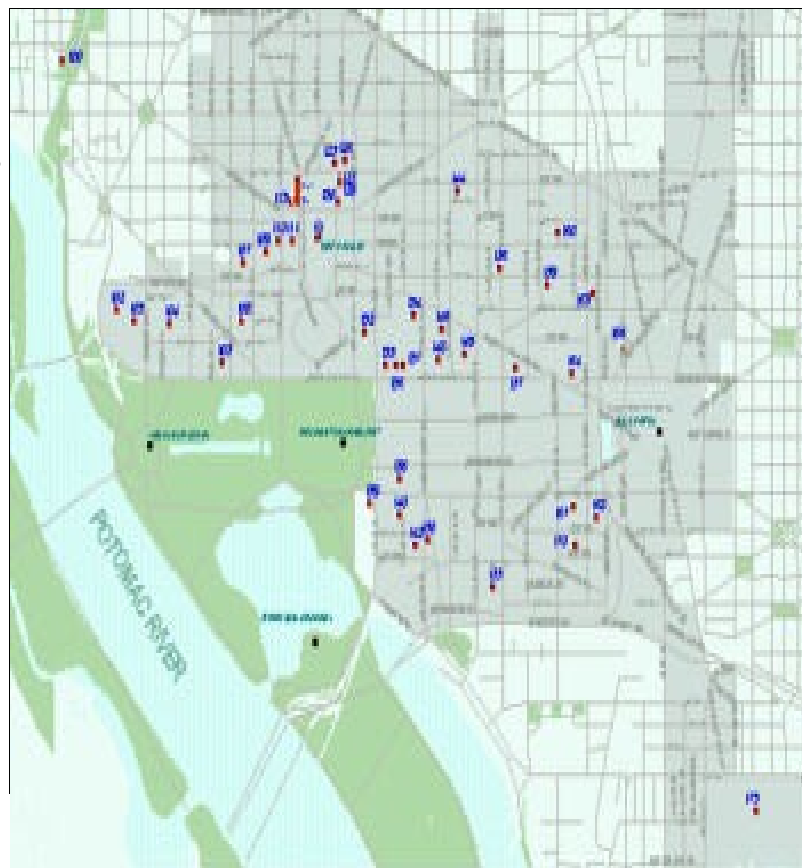
PI - Blaise Grden

Funding - FY04 150K+



# CADD/GIS Assistance to NIMA

- Provision of technical support by CADD/GIS Technology Center to U.S. National Imagery and Mapping Agency (NIMA) in support of Homeland Security Infrastructure Program (HSIP).
- NIMA and U.S. Geological Service (USGS) have partnered to develop Homeland Security Infrastructure Program (HSIP) Minimum Essential Data Sets (MEDS).
  - HSIP MEDS to serve as source of geospatially accurate information to support federal level readiness, response, and recovery efforts in cases of man-made or natural disasters.



PI - Bobby Carpenter

Funding - \$548.5K

# Electronic Contract Solicitations (ECS) for the Corps

In FY04, the EBS web sites will be consolidated into a new ECS web site located at the Center. The new site will be integrated with FedTeDS, ASFI, and FedBizOpps (through ASFI).

## Status:

- **The regulation establishing ECS has been signed.**
- **Awaiting approval of funding.**
- **Transitioning EBS code to ECS.**
- **Communicating with ASFI and FedTeDS.**

The screenshot shows a web browser window titled "Advised Solicitations - Microsoft Internet Explorer". The address bar shows "http://localhost/NewECS/AdvisedSolicitations.asp". The page header includes the US Army Corps of Engineers logo and the URL "ECS.USACE.ARMY.MIL". Below the header is a navigation bar with links: "Advised Solicitations", "Bid Results", "Award Results", "Archived Solicitations", "Other Opportunities", "Solicitation Search", and "Logout". The main content area displays a table of "Advised Solicitations".

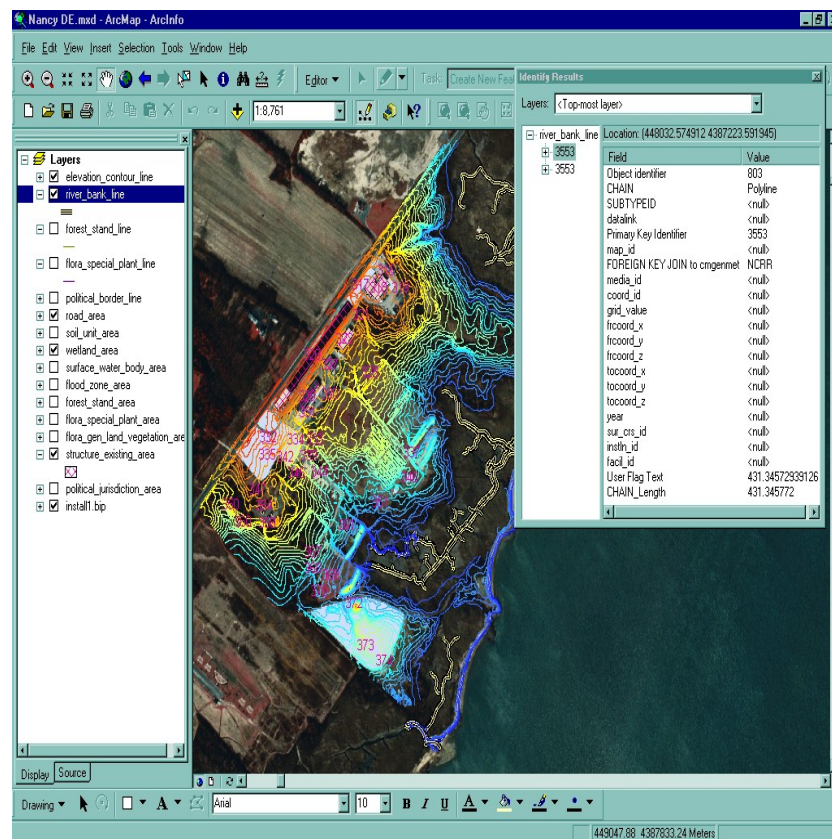
Issuing Agency	Solicitation Number	Title	Location	State	Issue Date	Closing Date	Last Amendment
<b>Architect-Engineer</b>							
USACE Humphreys Engineer Center	W912XX-04-B-0003	Sample 3	Somewhere	AL	10/23/2003	12/30/2003 2:00 PM	None
<b>Construction - IFB</b>							
USACE Humphreys Engineer Center	W912XX-04-B-0001	New ECS Solicitation	Here	MS	Under Evaluation		No: 1 10/29/2003
<b>Construction - RFP</b>							
USACE ERDC	W912XX-04-B-0004	Sample 1	Somewhere	LA	10/17/2003	11/18/2003 2:00 PM	None
USACE Omaha	W912XX-04-B-0002	Sample 2	Somewhere	MS	10/23/2003	12/30/2003 2:00 PM	None

PI - Elias Arredondo

Funding - \$315K

# FY03 Air Force GeoBase Pavement

- ❖ Conducted mini-SDSFIE Training workshop using Air Force pavement GIS data.
- ❖ Wrote procedures to manipulate CADD drawings into ArcGIS Geobase.
- ❖ Correlated pavement to the SDSFIE
- ❖ Migrated pavement CADD data into a SDSFIE AF Geobase.



PI – Nancy Towne  
Funding - \$25K

- **Basic & Advanced SDSFIE Implementation Workshops**

- ▀ Feb 04 Center

- ▀ Feb 04 COE

- ▀ Mar 04 ITAM

- ▀ Apr 04 NGB

- ▀ Jun 04 Center

- ▀ Aug 04 ITAM

- ▀ Aug 04 Center

- **USACE PROSPECT GIS-GPS Classes -**

- Mar 2004

- Sept 2004





# Smithsonian Support

The Center is providing Support to the Smithsonian's Office of Facilities Engineering and Operations that includes:

- 1) Development of a BIM (ArchiCAD) model of new National Museum of the American Indian to demonstrate object technology and facility management (underway)**
- 2) Support prototype test of Adept document management system (Feb)**
- 3) Conduct needs analysis for CADD and GIS**



PI – Toby Wilson
Funding - \$180K